

James M. Musser *et al.*  
Serial No. 08/160,965  
Page 2

Page 33, line 19, please change "IPTG" to -IPTG--.

#### IN THE CLAIMS:

B1  
Am 1/3  
6. (amended) A method of immunizing [humans] mammals against *Streptococcus pyogenes* infection, comprising:  
administering the vaccine of claim 1 to [said] a mammal in an amount sufficient to confer immunity to a *Streptococcus pyogenes* infection.

B2  
Am 1/5  
12. (amended) A method of immunizing humans against *Streptococcus pyogenes* infection, comprising:  
administering the vaccine of claim 5 to [said] a human in an amount sufficient to confer immunity to a *Streptococcus pyogenes* infection.

#### REMARKS

##### The Present Invention

The claimed invention includes vaccines that protect mammals against Group A *Streptococcus* infection, and methods for vaccinating mammals using these vaccines. These vaccines contain a group A streptococcal cysteine protease, which confers protection against any Group A streptococcal infection. The invention overcomes major obstacles that had previously precluded development of a safe and effective vaccine against streptococcal infection, which continues to be a serious health threat.

##### The Pending Claims

Prior to entry of the above amendments, claims 1 through 17 are pending. Claims 1 to 5 are directed to vaccines against group A streptococcal infection that comprise an S.